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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/575,051	04/03/2006	Giancarlo Tonon	02901/0203976-US0	5959
7278 7590 08/14/2008 DARBY & DARBY P.C. P.O. BOX 770 Church Street Station New York, NY 10008-0770				
EXAMINER				
LONG, SCOTT				
ART UNIT		PAPER NUMBER		
1633				
MAIL DATE		DELIVERY MODE		
08/14/2008		PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

**Advisory Action  
Before the Filing of an Appeal Brief**

**Application No.**

10/575,051

**Applicant(s)**

TONON ET AL.

**Examiner**

SCOTT LONG

**Art Unit**

1633

**--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

THE REPLY FILED 23 July 2008 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

1. ☒ The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods:

- a) ☒ The period for reply expires 3 months from the mailing date of the final rejection.  
b) ☐ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.  
Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**NOTICE OF APPEAL**

2. ☐ The Notice of Appeal was filed on \_\_\_\_\_. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a).

**AMENDMENTS**

3. ☐ The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will not be entered because  
(a) ☐ They raise new issues that would require further consideration and/or search (see NOTE below);  
(b) ☐ They raise the issue of new matter (see NOTE below);  
(c) ☐ They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or  
(d) ☐ They present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: \_\_\_\_\_. (See 37 CFR 1.116 and 41.33(a)).

4. ☐ The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).  
5. ☐ Applicant's reply has overcome the following rejection(s): \_\_\_\_\_.  
6. ☐ Newly proposed or amended claim(s) \_\_\_\_\_ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).  
7. ☐ For purposes of appeal, the proposed amendment(s): a) ☐ will not be entered, or b) ☐ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.  
The status of the claim(s) is (or will be) as follows:  
Claim(s) allowed: \_\_\_\_\_.  
Claim(s) objected to: \_\_\_\_\_.  
Claim(s) rejected: \_\_\_\_\_.  
Claim(s) withdrawn from consideration: \_\_\_\_\_.

**AFFIDAVIT OR OTHER EVIDENCE**

8. ☐ The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).  
9. ☐ The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing of good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).  
10. ☐ The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

**REQUEST FOR RECONSIDERATION/OTHER**

11. ☒ The request for reconsideration has been considered but does NOT place the application in condition for allowance because:  
See Continuation Sheet.  
12. ☐ Note the attached Information Disclosure Statement(s). (PTO/SB/08) Paper No(s). \_\_\_\_\_.  
13. ☐ Other: \_\_\_\_\_.

/Janet L. Epps-Ford/  
Primary Examiner, Art Unit 1633

Continuation of 11, does NOT place the application in condition for allowance because: The applicant has not submitted any claim amendments. Rather, the applicant has submitted arguments in response to the new grounds of rejection based upon claim amendments (filed 1/29/2008).

Basically, the applicant argues that the teachings of Schauer and Fontana do not teach the specific construct of the instant application used to knock out the CMAH gene. Specifically, the applicant argues that Fontana and Schauer do not teach knocking out specific portions of the gene between exons 8 and 15 (i.e., bases 787-1598 of cDNA encoding for CMAH) (Remarks, page 6, parag.2). The applicant seems to put great importance in the deletion of bases 787-1598 of CMAH cDNA, but the specification does not indicate that this region alone is capable of eliminating CMAH activity from CHO cells. Because Schauer and Fontana indicate that removing CMAH activity from CHO cells is the goal of their invention and that targeting vectors may contain large portions of the CMAH genomic DNA, encompassing 5' or 3' non-coding sequences and introns and exons, it seems that bases 787-1598 of the cDNA of CMAH would be comprised by their targeting vectors. Therefore, the examiner finds the applicant's arguments unpersuasive.

In addition, the applicant suggests that Schauer and Fontana might not be enabled for their general teachings encompassing knockouts of CMAH gene in CHO cells (Remarks, pages 6-7), because "gene targeting by homologous recombination in mammalian somatic cells is difficult and unpredictable" (Remarks, page 6, parag.4). The applicant suggests that the examiner has not articulated the reasons why a skilled artisan would have recognized that the results of the prior art were predictable. While gene targeting by homologous recombination in mammalian somatic cells may be difficult, it has become routine in many molecular biology laboratories around the world. In fact, this technique is performed so commonly, that between January 1, 2008 and August 6, 2008 there have been 45 patents issued that have the terms "homologous recombination," "gene targeting," and "cho cells" in their claims. So while the applicant may believe that this technique is difficult and unpredictable, the examiner believes the skilled artisans of these 45 patents would believe this technique to be difficult but predictable.

Accordingly, the instant claims 18-27 remain rejected for the reasons of record and the comments above.

/SDL/ Scott Long  
Patent Examiner, AU 1633